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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,364	04/12/2006	Isidro U. Ursua	148/430US	8231

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EXAMINER

EDGAR, RICHARD A

ART UNIT

PAPER NUMBER

3745

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/595,364

**Applicant(s)**

URSUA, ISIDRO U.

**Examiner**

Richard Edgar

**Art Unit**

3745

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 April 2006 under 35 USC 371.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 10 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10 and 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/12/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 10, 14, 16-19 rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 3,807,890 (Wright hereinafter) in view of United States Patent No. 4,151,423 (Hendel herinafter).

Wright shows a turbine housing comprising a housing body 10 having a first end, a second end, and a central region (see FIG. 1), wherein the housing body 10

comprises: a rectangular bore running therethrough (col. 2, lines 33-34); fluid flow restriction means comprising two moveable members 26, one each located towards the first and second ends of the housing 10, and arranged such that one of the first or second fluid flow restriction means moves to a first position when the other of the second fluid flow restriction means moves to the second position (see paragraph bridging columns 2 and 3). A turbine 52 is centrally housed within the body 10. A movement limiting means 28 limits the fluid flow restriction means 26 between a first and second position only. The housing 10 is mounted to a water bed (col. 4, lines 60-63) by way of a chain, cable or poles. The housing 10 is mounted within a flotation unit 66 to enable the housing to float.

Wright does not show a tapered, frusto-pyramidal, flared first and second ends relative to the central region.

Hendel describes a flared duct 301 having four sides taper to the central region for the purpose of increasing the kinetic energy of the fluid regardless the direction of the fluid flow (see col. 3, lines 58-64).

So, since Wright converts kinetic energy of a fluid flow, and Hendel teaches to have shaped ends for increasing the kinetic energy, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the housing ends of Wright to be shaped as described by Hendel for the purpose of increasing the kinetic energy of the fluid before interaction with the turbine.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 3,807,890 (Wright hereinafter) in view of United States Patent No. 4,151,423 (Hendel hereinafter) as applied to claim 14 above, and further in view of United States Patent No. 568,330 (Booraem hereinafter).

Booraem discloses for a tidal turbine, an arresting pin (e<sup>6</sup>) is to be used as an alternative to the curved tip (e<sup>5</sup>) of the fluid restriction means (e) for the purpose of limiting the movement of the fluid restriction means (see page 1, lines 75-78).

So, since the modified Wright has a curved tip 28 for limiting movement of the fluid flow restriction means 26, and Booraem teaches to use an arresting pin (e<sup>6</sup>) specifically instead of a curved tip (e<sup>5</sup>), it would have been obvious at the time the invention was made to further modify Wright such that an arresting pin is used instead of the curved tip, as taught by Booraem for the purpose of limiting the movement of the flow restriction means.

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 3,807,890 (Wright hereinafter) in view of United States Patent No. 4,151,423 (Hendel hereinafter) as applied to claim 19 above, and further in view of United States Patent No. 3,922,012 (Herz hereinafter).

Herz teaches a current power generator comprising a flotation unit 30 comprising means to enable entrapment of air within the flotation unit and means to enable control of release of air trapped within the flotation unit to enable the housing to float or sink in a fluid medium to a desired depth (see col. 5, line 52 to col. 6, line 12).

Since the modified Wright carries pontoons to float the housing into place and the modified Wright further positions the housing to a specific depth, and Herz teaches pontoons for a turbine with means for adjusting the buoyancy of the pontoons to adjust the depth of the turbine, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to further modify Wright, such that the pontoons are adjustable to control the depth of the turbine housing, as taught by Herz, for the purpose of positioning the turbine housing at a desired depth.

With respect to claim 21, Herz also shows the generator 21 being housed in a shell 21 which is preferably above a water surface, but also designed to be submerged (see col. 8, lines 56-61) for the purpose of keeping the electrical generator dry.

So, since the modified Wright uses an electric generator and Herz teaches to house the generator within a casing capable of being submerged under water, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to further modify Wright, such that the generator is housed within a waterproof shell for the purpose of protecting the generator when the generator is submerged below the water level.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 4,843 patented November 10, 1846 is cited for showing a tidal wheel housing having flow restriction means (A, B) about a wheel (E) for the purpose of directing fluid upon the wheel.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Edgar whose telephone number is (571) 272-4816. The examiner can normally be reached on Monday thru Friday, 7 am- 5 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard Edgar/  
Primary Examiner  
Art Unit 3745

RE